



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,778	06/30/2003	Henry Hung	57873.00035	1884

7590 11/03/2004

Attn: IP Dept.
Squire, Sanders & Dempsey L.L.P.
Two Renaissance Square
40 North Central Avenue, Suite 2700
Phoenix, AZ 85004-4498

EXAMINER

SEDIGHIAN, REZA

ART UNIT	PAPER NUMBER
----------	--------------

2633

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/611,778

Applicant(s)

HUNG, HENRY

Examiner

M. R. Sedighian

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,587,239. Although the conflicting claims are not identical, they are not patentably distinct from each other because both application claim a method of operating an optical network of a plurality of nodes, wherein a laser source as a network reference distributes optical reference signals to the network nodes, and a plurality of optical channels that each synchronized to the reference signals are utilized for communication between the nodes.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2633

Claim 1 recites the limitation "said multiple wavelength laser source" in line 3. There is insufficient antecedent basis for this limitation in the claim.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6-8, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gautheron (US Patent No: 6,025,948).

Regarding claims 1 and 13, Gautheron teaches a method of operating an optical network (fig. 1) coupling a plurality of nodes (13₁, 13₂, 12, fig. 1), comprising: providing a laser source (51, fig. 1 and col. 4, lines 40-47) as a network reference for distributing optical references signals to the network nodes (col. 4, lines 20-60); providing a plurality of channels (λ_1 , λ_2 , λ_3 , λ_4 , fig. 1) each synchronized to the reference signal (col. 3, lines 63-67, col. 4, lines 1-33, 55-60); and utilizing one or more of the channels for communication from one of the nodes to one other of the nodes (col. 4, lines 1-10). As to claim 13, Gautheron further teaches providing a plurality of channels (λ_1 , λ_2 , λ_3 , λ_4 , fig. 1) and selecting each channel by selecting one wavelength from a predetermined plurality of wavelengths (col. 3, lines 53-60, col. 6, lines 20-22) and by selecting one modulation frequency from a plurality of modulation frequencies (col. 2, lines 38-46).

Regarding claim 2, Gautheron teaches selecting each channel by selecting one wavelength of a plurality of predetermined optical wavelengths of the reference signals (col. 4, lines 40-50).

Regarding claim 3, Gautheron teaches selecting each channel by selecting one modulation frequency of a plurality of predetermined modulation frequencies (col. 2, lines 38-46, col. 4, lines 45-50).

Regarding claims 6 and 14, Gautheron teaches utilizing a multiple wavelength laser as the laser source (col. 4, lines 40-46).

Regarding claim 7, Gautheron teaches selecting each channel by selecting one wavelength of a plurality of predetermined optical wavelengths of the reference signals (col. 4, lines 40-50).

Regarding claim 8, Gautheron teaches selecting each channel by selecting one modulation frequency of a plurality of predetermined modulation frequencies (col. 2, lines 38-46, col. 4, lines 45-50).

7. Claims 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kai et al. (US Patent No: 6,278,536).

Regarding claim 17, Kai teaches an optical communication system (55, fig. 13), comprising: a plurality of nodes (62, 62A, 62B, 62C, 62D, fig. 13) each of the nodes being coupleable (60, fig. 10) to the network for exchanging information with other nodes (col. 12, lines 55-59), the information being transmitted over communication channels (λ_1 – λ_4 and λ_5 – λ_8 , fig. 13), each channel having a wavelength selected from a predetermined plurality of

Art Unit: 2633

wavelengths (col. 16, lines 61-67, col. 17, lines 1-4); apparatus at each node (the OPTICAL ADM of each node in fig. 13 and the OPTICAL ADM in fig. 14) for synchronizing the channels to optical reference signals (col. 19, lines 30-37, col. 20, lines 49-58 and SVOS, 107, fig. 14, note that OPTICAL ADM of each node has supervisory signal sending units 107 that sends optical reference signals to the next node); a source of the optical reference signals (the SVOS unit 107 in the ADM of node 62) that is being common to all of the plurality of nodes (for example, the SVOS unit 107 of ADM node 62 is common to all other nodes, such as nodes 62A, 62B, 62C and 26D).

Regarding claim 18, Kai teaches the source comprises of a laser source (col. 20, line 53).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautheron (US Patent No: 6,025,948) in view of Kosaka (US Patent No: 6,038,062).

Regarding claims 11-12 and 15, Gautheron differs from the claimed invention in that Gautheron does not specifically teach combining outputs of a plurality of multiple wavelength lasers to provide the laser source. Kosaka discloses reference laser sources (2, 2', fig. 6) of different wavelengths (λ_p , $\lambda_{p'}$, fig. 6) for controlling of optical amplifiers (8, 10, fig. 6) of an optical transmission system (col. 17, lines 15-35). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a plurality of reference

Art Unit: 2633

laser sources such as the ones of Kosaka for the reference transmission unit (the monitoring transmission unit 50) of Gautheron in order to control and monitor transmission characteristics such as transmission paths and operation of optical amplifiers.

10. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kai et al. (US Patent No: 6,278,536) in view of Ishimatsu et al. (US Patent No: 6,018,406).

Regarding claim 19-20, Kai differs from the claimed invention in that Kai does not disclose a multiple wavelength laser source, or a plurality of multiple wavelength lasers as a source of optical reference signals. Ishimatsu teaches multiple wavelength lasers as a source of optical reference signals (col. 5, lines 43-63 and 130-2, 130-m, 150, fig. 2) for controlling the operation of the transmission system (col. 8, lines 50-67, col. 9, lines 1-4). Therefore, it would have been obvious to an artisan at the time of invention to incorporate reference laser sources, or SV transmission units that transmit SV signals, such as the ones of Ishimatsu for the reference transmission unit (the SVOS unit 107) of Kai in order to control and monitor the transmission characteristics of the optical system.

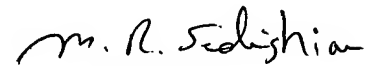
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034.

The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


M. R. SEDIGHIAN
PRIMARY EXAMINER